

REMARKS

Claims 30-60 are all the claims pending in the application, claims 1-29 having been canceled by the present amendment. No new matter has been added. Accordingly, entry of the foregoing amendments is respectfully requested. The foregoing new claims are being submitted to claim disclosed embodiments more completely. The various rejections raised in the Office Action are rendered moot in view of the cancellation of the rejected claims.

Applicant submits that the new claims submitted herewith are patentable since the prior art, including Sgroi (U.S. patent 5,357,048), Longo (U.S. patent 6,066,794), Smith et al. (U.S. patent 6,018,118), does not teach or suggest a number of features recited by the claims. By non-limiting example, Applicant submits that the prior art does not teach or suggest:

“a controllable low frequency oscillator” as recited by claim 30;

“a controllable envelope generator” as recited by claim 40;

the numerically multiplying and generating operations recited by claim 43;

the numerically adding and generating operations recited by claim 46;

the identifying, obtaining, and generating operations recited by claim 49;

the obtaining and changing operations recited by claims 51-53; and

the obtaining and generating operations recited by claims 54-57.

Applicant further submits that dependent claims 31-39, 41, 42, 44, 45, 47, 48, 50, and 58-60 are also patentable at least by virtue of their respective dependencies on the patentable independent claims.

Figure for Cover Sheet

As a preliminary matter, should the Examiner deem the claims of the present application to be allowable, Applicant respectfully requests that Figure 67 be used as the figure for the cover sheet on the issued patent. The Examiner is invited to telephone the undersigned to discuss alternative figures should it be necessary.

Applicant further notes that the application was published with the figures printed in duplicate. Applicant respectfully requests the Examiner's assistance in correcting this matter so that any patent issuing from the present application will only contain a single copy of the figures.

Substance of Interview

Applicant and the undersigned gratefully acknowledges the courtesies extended by the Examiner in the lengthy March 25, 2005, telephone interview on this matter. The granting of the interview to discuss the Office Action, which was a Final rejection, was very much appreciated. Pursuant to M.P.E.P. § 713.04, Applicant provides the following remarks concerning the interview.

Prior to the interview, Applicant provided the Examiner with several points for discussion.

These discussion points are reproduced below:

The Office Action of January 13, 2005, does not address a number of points raised in pages 7-15 of Applicant's Response filed October 22, 2004. Accordingly, Applicant seeks clarification of the Examiner's position on the following points.

1) With respect to claims 1 and 2, Applicant submits that Smith does not teach a controllable lower frequency oscillator (LFO). (See pages 6-7 of the Response filed 10/22/04).

2) With respect to claims 1 and 2, Applicant submits that there is no suggestion to combine Sgroi and Smith because these systems have incompatible architectures. (See pages 7-9 of the Response filed 10/22/04).

3) With respect to claims 15 and 20, Applicant submits that there is no suggestion to combine Sgroi and Longo since such a combination would completely change how the Sgroi system operates. (See pages 9-12 of the Response filed 10/22/04).

4) With respect to claim 20, Applicant submits that it is unclear as to how Sgroi and Smith have been applied in the rejection under 35 U.S.C. §103(a) since only the purported teachings of Longo have been alleged in the Action. (See page 12 of the Response filed 10/22/04).

5) With respect to claim 20, Applicant submits that there is no suggestion to combine Sgroi and Longo for the reasons set out in point 3 above. (See also page 12 of the Response filed 10/22/04).

6) With respect to claim 20, Applicant submits that Longo does not teach any of the conversion methods recited in the Markush group. (See pages 13-15 of the Response filed 10/22/04).

7) Although not addressed in the previously submitted response, Applicant would also like to discuss alternative, clarifying, language for claims 1 and 2. Specifically, Applicant is considering changing the "transient generator" terminology to "envelope generator."

The references discussed during the phone interview included Sgroi (U.S. patent 5,357,048), Longo (U.S. patent 6,066,794), and Smith et al. (U.S. patent 6,018,118).

With regard to point 1, Applicant noted that Smith does not teach a controllable LFO. The Examiner acknowledged Applicant's position and indicated that he would further consider the teachings of the Smith patent with this in mind.

With regard to point 2, Applicant discussed at length that Sgroi discloses a time-asynchronous system, and that Smith relates to an incompatible, and fundamentally different, time-synchronous system. Applicant stressed that should one of ordinary skill in the art modify the Sgroi system with the LFO teachings of Smith, the resulting system would require a fundamental change in how Sgroi operates-- from a time-asynchronous system to a time-synchronous system. Applicant further explained that in such a situation, M.P.E.P. § 2143.01 unambiguously requires a finding that the teachings of Sgroi and Smith are not sufficient to render the claims *prima facie* obvious. The Examiner was not persuaded and remarked that Smith was not being used according to its teachings, but rather to show that a LFO (not the LFO taught by Smith) can be used to modify the Sgroi system.

The Examiner indicated that there was no “fundamental change” in how Sgroi operates since Sgroi is a time-asynchronous system before modification, and remains a time-asynchronous system after modification by the LFO teachings of Smith. Applicant requested clarification as to how Sgroi can be modified by Smith in a manner inconsistent with the teachings of that reference (Smith). The Examiner again replied that Smith was not being used according to its teachings, but rather to show that any LFO can be used to modify the Sgroi system.

With regard to point 3, Applicant explained that the purported combination of Sgroi and Longo would fundamentally change the operation of Sgroi from a system which converts non-midi signals to MIDI signals to a system which converts MIDI signals to MIDI signals. Applicant further stressed because of this fundamental change in operation of the Sgroi system, M.P.E.P. § 2143.01 requires a finding that the teachings of Sgroi and Longo are not sufficient to render the claims *prima facie* obvious. The Examiner recognized that the above-identified change in signal generation was significant. However, the Examiner remarked that such a change did not change the principle of operation of Sgroi. The Examiner specifically stated that Sgroi, before modification, is a system that receives an input signal and generates an output signal, and after modification by Longo, Sgroi still receives an input signal and generates an output signal. Thus, the principle of operation remains unchanged. Applicant noted, and respectfully disagreed with, this extremely broad interpretation of the principle of operation of Sgroi.

With regard to point 4, the Examiner indicated that Sgroi and Smith have been applied to teach the claim elements of claim 20, as these references are applied to claims 1 and 2. The Examiner further remarked that block 220 of Smith was used to teach the various conversion methods recited in this claim.

Points 6 and 7 were not specifically discussed during the interview.


CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge any fees that arise in connection with this filing which are not covered by the money enclosed, or credit any overpayment, to Deposit Account No. 02-0460.

Respectfully submitted,

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